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| APPLICATION NO.                     | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-------------------------------------|----------------|----------------------|-------------------------|------------------|
| 09/648,632                          | 08/28/2000     | Takayuki Yabu        | 001092                  | 5763             |
| 23850 75                            | 590 11/19/2002 |                      |                         |                  |
| ARMSTRONG, WESTERMAN & HATTORI, LLP |                |                      | EXAMINER                |                  |
| 1725 K STREET, NW. SUITE 1000       |                |                      | JACKSON, CORNELIUS H    |                  |
| WASHINGTON, DC                      | N, DC 20006    |                      | ART UNIT                | PAPER NUMBER     |
|                                     |                |                      | 2828                    |                  |
|                                     |                |                      | DATE MAILED: 11/19/2002 | 1                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | _  |  |   |
|--|--|--|---|
|  | Application No.  | Applicant(s)   | 7 |
| •  | 09/648,632   | YABU, ET AL.   |   |
| Office Action Summary  | Examin r   | Art Unit   |   |
|  | Cornelius H. Jackson   | 2828   |   |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover shet with the  | correspondence address   |   |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute.  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | 36(a). In no event, however, may a reply be within the statutory minimum of thirty (30) dwill apply and will expire SIX (6) MONTHS fro | timely filed  ays will be considered timely.  om the mailing date of this communication.  NED (35 U.S.C. § 133). |   |
| 1) Responsive to communication(s) filed on <u>02 (</u>   | <u> October 2002</u> .   |  |   |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th   | is action is non-final.  |  |   |
| 3) Since this application is in condition for allows<br>closed in accordance with the practice under<br>Disposition of Claims  |  |  |   |
| 4)⊠ Claim(s) <u>1 and 2</u> is/are pending in the applicat   | ion.   |  |   |
| 4a) Of the above claim(s) is/are withdray  |  |  |   |
| 5) Claim(s) is/are allowed.  |  |  |   |
| 6)⊠ Claim(s) <u>1 and 2</u> is/are rejected.   | •  | Pane de  |   |
| 7) Claim(s) is/are objected to.  |  | DALILID  |   |
| 8) Claim(s) are subject to restriction and/o Application Papers  | r election requirement. <i>ਤੁਸੀਂ</i>   | PERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800   |   |
| 9) The specification is objected to by the Examine   |  | 2000   |   |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accept  | oted or b)□ objected to by the Ex  | aminer.  |   |
| Applicant may not request that any objection to the  | e drawing(s) be held in abeyance.  | See 37 CFR 1.85(a).  |   |
| 11)☐ The proposed drawing correction filed on  | ၞis: a)□ approved b)□ disapp   | roved by the Examiner.   |   |
| If approved, corrected drawings are required in rep  | bly to this Office action.   |  |   |
| 12)☐ The oath or declaration is objected to by the Ex  | aminer.  |  |   |
| Priority under 35 U.S.C. §§ 119 and 120  |  |  |   |
| 13) Acknowledgment is made of a claim for foreign  | priority under 35 U.S.C. § 119   | (a)-(d) or (f).  |   |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |  |  |   |
| 1. Certified copies of the priority documents  | s have been received.  |  |   |
| 2. Certified copies of the priority documents  | s have been received in Applica  | ation No   |   |
| <ul> <li>Copies of the certified copies of the prior</li> <li>application from the International Bu</li> <li>See the attached detailed Office action for a list</li> </ul>   | reau (PCT Rule 17.2(a)).   | -  |   |
| 14)☐ Acknowledgment is made of a claim for domesti   | c priority under 35 U.S.C. § 119   | e) (to a provisional application).   |   |
| a) ☐ The translation of the foreign language pro 15)☐ Acknowledgment is made of a claim for domesti  |  |  |   |
| Attachment(s)  |  |  |   |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)  | 5) Notice of Informa   | ary (PTO-413) Paper No(s)<br>al Patent Application (PTO-152)   |   |
|  |  |  |   |

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### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02 October 2002 has been entered.

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. Regarding claims 1 and 2, the functional "whereby/wherein" renders the claim indefinite since it has been held that the functional "whereby/wherein" statement does

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not define any structure and accordingly can not serve to distinguish. In re Mason, 114 USPQ 127, 44 CCPA 937 (1957).

5. Claims 1 and 2 are also unclear as to how "said return plate" is thicker than an entering depth of the high frequency current".

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itakura (JP 1-268078 A) [Applicant's prior art]. Itakura teaches a discharge electrode connecting structure for a laser apparatus Figs. 6-7 comprising a pair of anode 105A and cathode 105B provided within a laser chamber 102 for sealing a laser gas in an opposing manner, generating a discharge so as to excite a laser gas flowing there between and oscillating a laser beam; a conductive anode base 106 holding the anode; an insulative cathode base 108 holding the cathode; a return plate 109 electrically connecting the anode base to the laser chamber so as to supply a current to the anode, as stated in Applicant's specification, page 1, paragraph 3 through page 3, line 5; and a high voltage power source supplying a high frequency current between the anode and the cathode, as stated in Applicant's specification, page 2, lines 5-11. Itakura

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fails to teach the thick of the anode base equal to or between, 100 to 500 μm. It has been held that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding claim 2, Itakura teaches the return plate is arranged substantially in parallel to a gas flow of the laser gas flowing between the discharge electrode, see specification, page 2, lines 20-26.

## Response to Arguments

Applicant's arguments filed 02 October 2002 have been fully considered but they are not persuasive. Applicant argued Itakura (JP 1-268078 A) does not teach or suggest the features newly cited by amendment.

Examiner relies that Itakura (JP 1-268078 A) does teach a high voltage power source supplying a high frequency current between the anode and the cathode, as stated in Applicant's specification, page 2, lines 5-11.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (703) 306-5981. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

chj

November 18, 2002

Paul IP

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800